TETRA TECH

December 14, 2017

Mr. Douglas Byrd
Columbia Custer LLC
PO Box 1794
Aptos, CA 95001

via email to doug@douglasbyrd.com

RE: Abbreviated Generic Applications Corrective Action Plan (CAP) AC-07;
AAA Storage, 1530 Columbia Avenue, Helena, Montana;
Facility ID 25-08847, Release 3840, Work Plan 10763;
Tetra Tech Project No. 117-8070001

Dear Mr. Bergum:

Tetra Tech prepared this Abbreviated Generic Applications Corrective Action Plan (CAP) AC-07 in response to the Montana Department of Environmental Quality's (DEQ's) letter dated November 21, 2017 concerning the AAA Storage Facility referenced above. Seven tasks have been identified for this CAP: (1) Work Plan, (2) Project Management, (3) Mobilization, (4) Monitoring, (5) Laboratory Analysis and Fee, (6) Data Validation, and (7) Reporting. Work will begin after approval from the DEQ and satisfactory eligibility determination and obligation of funds from the Petroleum Tank Release Compensation Board (PTRCB).

SCOPE OF SERVICES

Task 1 Work Plan

- The task includes the preparation of this Abbreviated Generic Applications CAP AC-07.

Task 2 Project Management

- This task includes all labor associated with purchasing and/or renting supplies, field coordination, and subcontractor management.

Task 3 Mobilization

- This task includes all labor and vehicle charges associated with two mobilizations of a staff scientist to the site to conduct field work.

Task 4 – Groundwater Monitoring

- Tetra Tech will sample up to seven monitoring wells including MW-3, -4, -5, -6, OBS-1, OBS-2, and SP-1. The sampling event will occur during winter months between January 1 and March 16, 2018.
- Static water level and free product thickness measurements (if applicable) will be measured in each accessible monitoring well prior to sampling. Where free product is present no sample will be collected.
- Groundwater samples from the monitoring wells will be collected using a 12-volt submersible pump capable of draw rates of less than 1-liter per minute and low flow sampling protocols (i.e. field parameter stabilization of temperature, pH, dissolved oxygen, conductivity, and oxidation reduction potential). In the event insufficient water is present during the sampling event for using a submersible pump, wells will be purged and sampled using disposable polyethylene bailers.
- Purge water from sampling will be broadcast on-site near each well.
- Samples will be hand delivered to Energy Laboratories, Inc. in Helena, Montana for analysis.

- Groundwater samples from each monitoring well will be analyzed for volatile petroleum hydrocarbons (VPH), and intrinsic biodegradation indicators including sulfate, nitrate/nitrate, dissolved ferrous iron and manganese, and methane.

Task 5 Laboratory Analysis with Fee

- Includes laboratory analytical costs for groundwater samples and standard per sample fee.

Task 6 Data Validation

- Includes labor costs for a project scientist to generate up to two data validation reports. If field conditions cause the monitoring event to occur over two days then two separate trips to the laboratory may be necessary due to the 48-hour holding time required for nitrate samples. In this instance the laboratory would issue two separate reports, one for each sample submission. The labor required to produce a data validation report is dependent on the number laboratory reports that must be reviewed.

Task 7 Reporting

- Within 30 days of receipt of the first set of analytical results, Tetra Tech will complete an Abbreviated Generic Applications Report (AR-07) that will include the following:

    1. A description of findings from the groundwater sampling event similar to sections found in an Abbreviated Groundwater Monitoring Report (AR-01).
    2. A Release Closure Plan (RCP).
    3. Conclusions and recommendations for additional work, if necessary.
    4. A table and description of the analytical results.
    5. A location map, a site map, and a potentiometric surface map.
    6. A copy of the lab report(s).

- Only electronic copies of the reports will be submitted to the DEQ unless a paper copy is specifically requested.

COST AND SCHEDULE

Our cost to complete the above mentioned tasks is estimated to be $8,882.12 and is itemized on the attached spreadsheet. The cost estimate assumes the proposed PTRCB 2017 billing rates and includes Tetra Tech staff time, sampling, and analytical services.

A copy of this CAP has been submitted on your behalf to the DEQ and the PTRCB for their approval. Any changes to the scope of work required by the DEQ may require a budget modification. Should you have any questions please feel free to contact me at (406) 437-9858, or by email at nicholas.sovner@tetratech.com.

Sincerely,

Nicholas Sovner
Environmental Scientist/Project Manager

Encl: *Cost Estimate*

Ec: *Mr. William Bergum, DEQ-PTCS, wbergum@mt.gov*
Ms. Ann Root, PTRCB, aroot@mt.gov

COST ESTIMATE
CAP AC-07
AAA STORAGE
HELENA, Montana
Facility ID # 25-08847, Release 3840, Work Plan 10763
December 2017

	RATE	UNITS	COST
TASK NO. 1: CAP			
LABOR			
Project Scientist, per hour	$118.82	7	$831.74
Senior Scientist	$132.49	1	$132.49
		TOTAL TASK 1	**$964.23**
TASK NO. 2: PROJECT MANAGEMENT			
LABOR			
Project Scientist, per hour	$118.82	4	$475.28
Clerical, per hour	$64.71	1	$64.71
		TOTAL TASK 2	**$539.99**
TASK NO. 3: MOBILIZATION (2 TRIPS)			
Mobilization per mi.*	$12.73	15	$190.95
		TOTAL TASK 3	**$190.95**
*Cost includes labor for travel time to the site, laboratory, equipment suppliers, mobe/demobe, and prep time			
TASK NO. 4 MONITORING			
Metals Filters, each	$20.06	7	$140.42
Monitoring, per well	$180.00	7	$1,260.00
		TOTAL TASK 4	**$1,400.42**
TASK NO. 5 LABORATORY ANALYSES W/FEE			
Monitoring Wells (MW-3 through -6, OBS-1, OBS-2, and SP-1)			
VPH	$102.00	7	$714.00
Sulfate	$8.50	7	$59.50
Nitrate/Nitrite	$42.50	7	$297.50
Dissolved Metals (Fe2+, Mn)	$17.00	7	$119.00
Methane	$42.50	7	$297.50
Sampling Fee, per well	$10.00	7	$70.00
Sample shipping	$0.00	0	$0.00
		TOTAL TASK 5	**$1,557.50**
TASK NO. 6: DATA VALIDATION			
Project Scientist, per hour	$118.82	6	$712.92
		TOTAL TASK 6	**$712.92**
TASK NO. 7: REPORTING			
LABOR			
Abbreviated Generic Investigation Report, RPT AR-07			
Sr. Scientist, per hour	$132.49	2	$264.98
Project Scientist, per hour	$118.82	16	$1,901.12
Drafter/CAD, per hour	$83.43	1	$83.43
Clerical, per hour	$64.71	1	$64.71
Release Closure Plan			
Sr. Scientist, per hour	$132.49	1	$132.49
Project Scientist, per hour	$118.82	9	$1,069.38
		TOTAL TASK 7	**$3,516.11**
		TOTAL ESTIMATED COST	**$8,882.12**